



U.S. Department
of Transportation
**Research and
Special Programs
Administration**

400 Seventh St., S.W.
Washington, D.C. 20590

**IAEA CERTIFICATE OF COMPETENT AUTHORITY
SPECIAL FORM RADIOACTIVE MATERIALS
CERTIFICATE NUMBER USA/0631/S, REVISION 0**

This certifies that the source described has been demonstrated to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency¹ and the United States of America² for the transport of radioactive materials.

1. Source Identification - AEA Technology QSA, Inc. Model Number X.3.
2. Source Description - Cylindrical double encapsulation made of stainless steel and tungsten inert gas or laser seal welded. Approximate outer dimensions are 22.5 mm (0.89 in.) in diameter and 31.2 mm (1.23 in.) in length. Minimum wall thickness of the outer encapsulation is 1.2 mm (0.05 in.). Construction shall be in accordance with attached AEA Technology QSA, Inc. Drawing Number RBA11006, Rev. A.
3. Radioactive Contents - No more than either 185 GBq (5.0 Ci) of Americium-241 or 185 GBq (5.0 Ci) of Plutonium-238. The Americium-241 and Plutonium-238 are in oxide form and mixed with Beryllium powder and pressed into a solid pellet.
4. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
5. Expiration Date - This certificate expires June 15, 2008.

1 "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

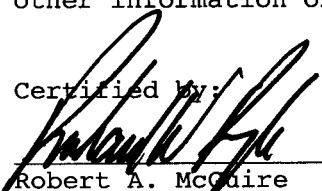
2 Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

(- 2 -)

CERTIFICATE USA/0631/S, REVISION 0

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated April 16, 2003 and June 10, 2003 submitted by AEA Technology QSA, Inc., Burlington, MA, and in consideration of other information on file in this Office.

Certified by:



Robert A. McGuire
Associate Administrator for
Hazardous Materials Safety

JUN 12 2003

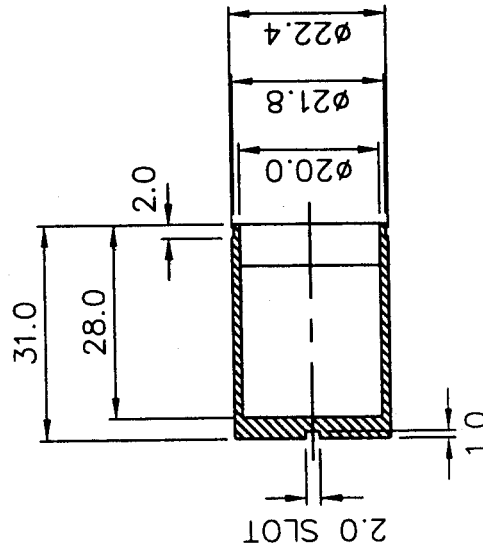
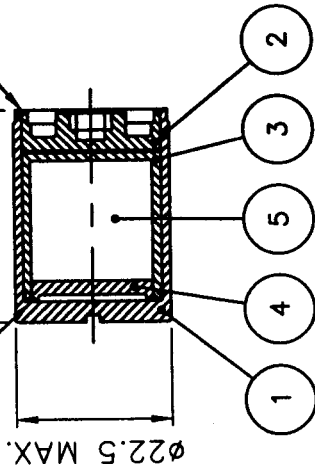
(DATE)

Revision 0 - Original issue.

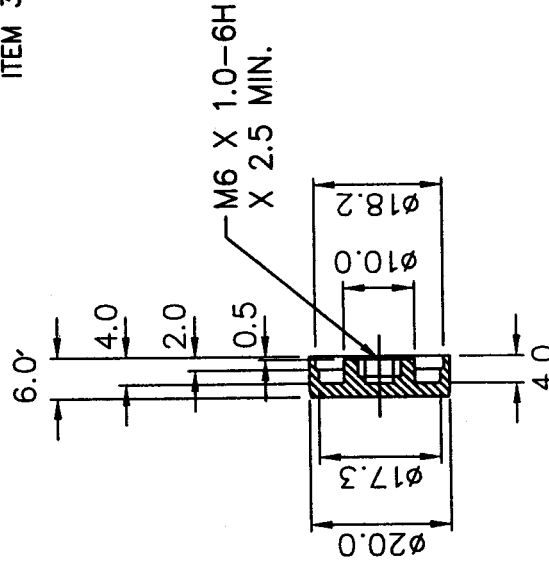
TIG OR LASER WELD TO SEAL

31.2 MAX.

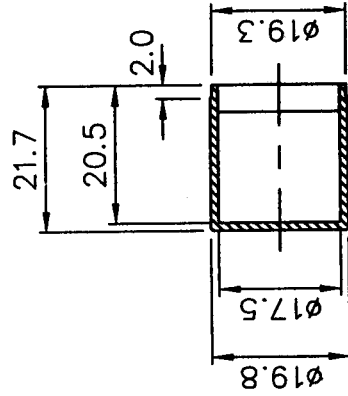
TIG OR LASER WELD TO SEAL



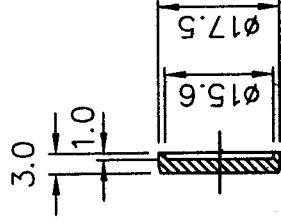
ITEM 1



ITEM 2



ITEM 3



ITEM 4

ITEM No.	DESCRIPTION	QTY.
1	SHEATH BODY STAIN.STL	1
2	SHEATH LID STAIN.STL	1
3	CELL BODY STAIN.STL	1
4	CELL LID STAIN.STL	1
5	ACTIVE MATERIAL	AR

APPROVALS	
<i>[Signature]</i>	16 Apr 83
<i>[Signature]</i>	16 Apr 83

DIMENSIONS IN MILLIMETERS
UNLESS OTHERWISE STATED TOLERANCES:

X	±0.5	N/A
XX	±0.1	INTERNAL
XXX	±0.05	EXTERNAL
ANGULAR	±5°	



40 NORTH AVE, BURLINGTON, MA 01803

DESCRIPTIVE DRAWING

TITLE X3 CAPSULE ASSEMBLY

SIZE	DWG. NO.	SCALE:	SHEET 1 OF 1	REV
A	RBA11006	NONE		A